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MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

Q-120 SERIES

Jameco Part Number 132370 (Q-120D)

.LOW COST, HIGH RELIABILITY
.105°C OUTPUT CAPACITOR
.INTERNATIONAL AC INPUT RANGE
.HIGH EFFICIENCY, LOW WORKING TEMPERATURE
.SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
.SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
.COMPACT SIZE, LIGHT WEIGHT
.100% FULL LOAD BURN-IN TEST
.BUILT IN EMI FILTER, LOW RIPPLE NOISE

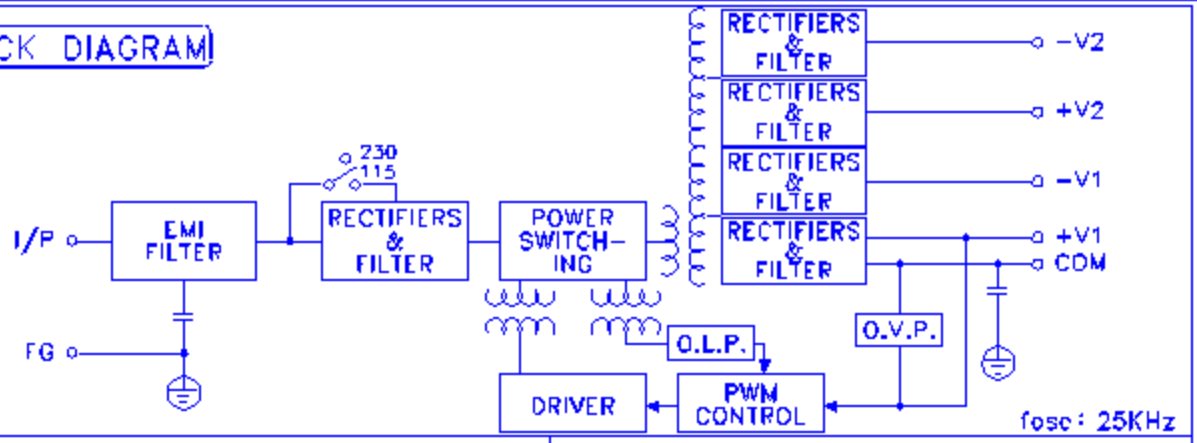
MODEL / SPECIFICATION	Q-120B				Q-120C				Q-120D			
	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
DC OUTPUT VOLTAGE	5V	12V	-5V	-12V	5V	15V	-5V	-15V	5V	12V	24V	-12V
OUTPUT V. TOLERANCE	±2%	±6%	±6%	±6%	±2%	+10,-5%	±6%	+10,-5%	±2%	±6%	±6%	±6%
OUTPUT RATED CURRENT	11A	4A	1A	1A	10A	3.5A	1A	1A	8A	2A	2A	1A
OUTPUT CURRENT RANGE	2-12A	0.5-5A	0.2-1A	0.2-1A	2-12A	0.5-5A	0.2-1A	0.2-1A	2-12A	0.2-5A	0.2-2A	0.2-1A
RIPPLE & NOISE (p-p)	80mV	120mV	80mV	120mV	80mV	150mV	80mV	150mV	80mV	120mV	180mV	120mV
LINE REGULATION	±0.5%	±1%	±1%	±1%	±0.5%	±1%	±1%	±1%	±0.5%	±1%	±1%	±1%
LOAD REGULATION	±0.5%	±5%	±5%	±5%	±0.5%	±6%	±5%	±6%	±0.5%	±5%	±5%	±5%
DC OUTPUT POWER	120W				122.5W				124W			
EFFICIENCY	77%				76%				80%			
DC VOLTAGE ADJ.	CH1:+10,-5%				CH1:+10,-5%				CH1:+10,-5%			
INPUT VOLTAGE RANGE	88~132VAC / 176~264VAC SELECTED BY SWITCH 47~63Hz; 240~370VDC											
AC CURRENT	2.5A/115V 1.25A/230V											
INRUSH CURRENT	COLD START 35A											
LEAKAGE CURRENT	<3.5mA/240VAC											
OVERLOAD PROTECTION	105%~135% TYPE:OUTPUT SHUTDOWN RESET:RECYCLE AC ON / OFF											
OVER VOLTAGE PROTECTION	CH1:5.75~6.75V											
OVER TEMP. PROTECTION	----------											
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)											
SETUP, RISE, HOLD UP TIME	200ms, 50ms, 20ms											
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES											
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC											
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms											
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH											
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH											
DIMENSION	199*110*50mm CASE:906											
WEIGHT	0.88Kgs											
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED											
EMC STANDARDS	CISPR22 (EN55022) CLASS B, IEC801-2,3,4, IEC555-2 VERIFICATION											

NOTE :
1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
2.TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
5.LOAD REGULATION IS MEASURED FROM 20% TO 100% RATED LOAD, AND OTHER OUTPUT AT 60% RATED LOAD.
6.EACH OUTPUT PROVIDE UP TO MAXIMUM CURRENT, BUT TOTAL LOAD CAN NOT EXCEED MAX. OUTPUT POWER.
7.C2,3,11 MUST BE REMOVED.

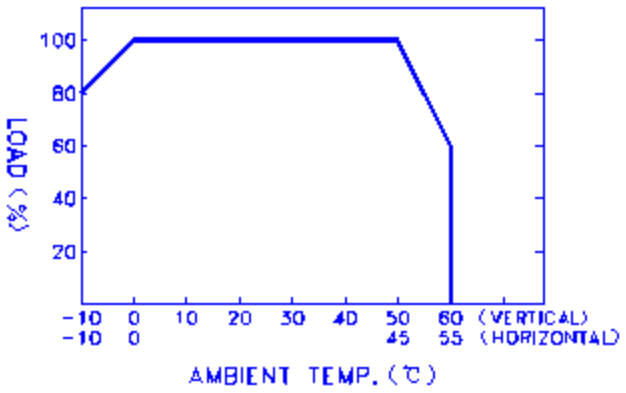
JUN.11.98

Q-120 SERIES

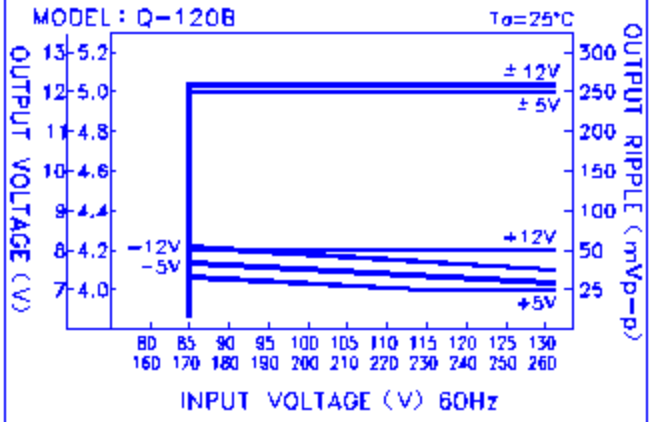
BLOCK DIAGRAM



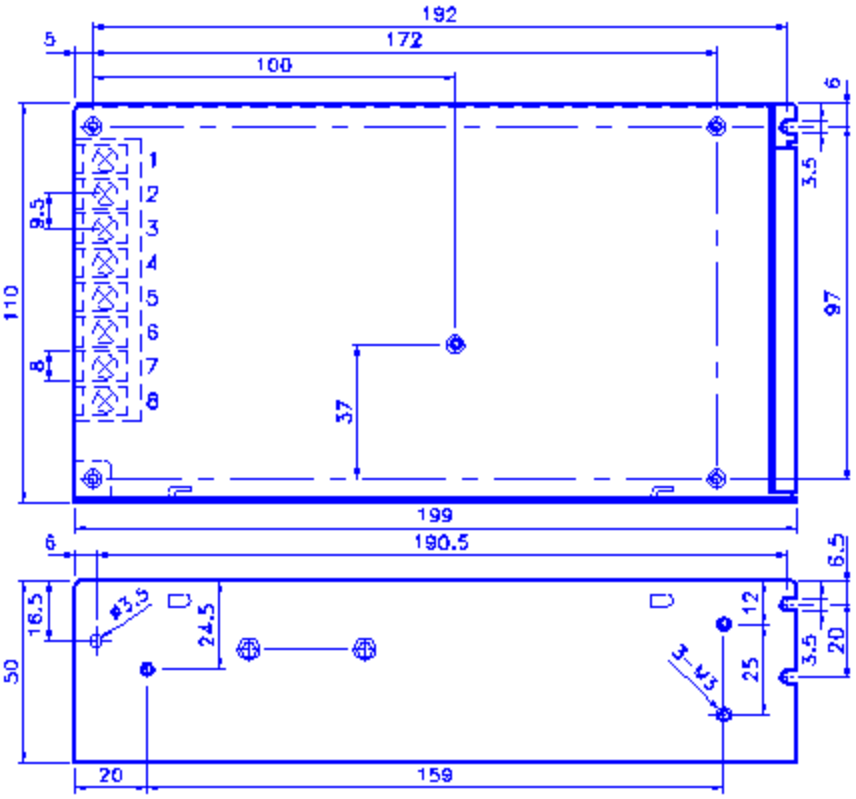
OUTPUT DERATING



STATIC CHARACTERISTICS



DIMENSION (mm)



- CASE : 906
- TERMINAL PIN NO. ASSIGNMENT
  - PIN 1,2 : AC INPUT
  - PIN 3 : FG ⏚
  - PIN 4,5 : DC OUTPUT
  - PIN 6 : DC OUTPUT -V1
  - PIN 7 : DC OUTPUT COM
  - PIN 8 : DC OUTPUT +V1

MODEL / PIN NO.	Q-120B	Q-120C	Q-120D
4	+12V	+15V	+24V
5	-12V	-15V	+12V